Before the
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Annual Compliance Report, 2012   Docket No. ACR2012

PUBLIC REPRESENTATIVE RESPONSE TO SURREPLY COMMENTS
OF THE AMERICAN CATALOG MAILERS ASSOCIATION (ACMA)

(February 27, 2013)

The Public Representative hereby answers the Motion of the American Catalog
Mailers Association (AMCA) for Leave to Submit Surrreply Comments and the Surreply
Comments of the American Catalog Mailers Association (ACMA) filed concurrently on
February 20, 2013.[1]

The ACMA failed to respond to the major issues the Public Representative raised
with regard to its cost index, but the Public Representative feels obliged to reply to
ACMA's surreply as its comments raise points that need to be clarified for the record.

I.   ACMA's Use of its Cost Index Does Not Show that Excess Capacity Is
           Misallocated to Standard Flats.

The Public Representative believes ACMA does not make meaningful use of its
cost index in the charts it has presented in this docket. ACMA's index shows that the
cost index for Standard Flats is currently much larger than the cost indices for Postal
Input Costs and Standard Letters, even though all of those indices were equal in 1998.[2]

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[1] A motion for leave to file a response to AMCA's motion for leave to file the surreply comments is
not required. 39 CFR 3001.21(b). Docket No. C2012-2, MC2012-26, Order on Elective Filing Regarding
Post Office Box Service Enhancements, February 14, 2013 at n. 33.

[2] The index for Standard Flats is about twice as large as the index for Postal Input Costs.

ACMA's employs its cost index to attribute the current differential between the cost indices for Standard Flats and Postal Inputs to the misallocation of excess capacity costs to Standard Flats. ACMA Initial Comments at 9. A close look at Graph 1, in its Initial Comments, makes clear that the differential between the two indices rose dramatically from 2004 through 2009, and then leveled off.

However, ACMA's index is not needed to demonstrate that since 2004 there has been a difference between the change in the unit costs of Standard Flats compared to all other mail. This difference could be the result of either, or both, of the following two factors: first, Standard Flats costs increased faster than the total cost of inputs used for all mail, and/or second, Standard Flats volume declined faster than did the volume of all mail.

Table 1, below, shows that during the first period from 2004 to 2009, attributable Standard Flats costs declined annually by 1.5 percent compared to an annual decline of 1.8 percent in the attributable cost of all mail.[3] At the same time, Standard Flats volume experienced a 10.8 percent average annual decrease compared to a 3.0 percent annual volume decrease for all mail. This comparison illustrates that during the period 2004 to 2009, Standard Flats were much less able to shed costs in response to volume declines compared to all other mail.[4] However, this does not mean that the Commission, or the Postal Service's measurement of costs, misallocates excess capacity to Standard Flats.

In the more recent period between 2010 and 2012, Standard Flats volume declined 8.3 percent per year, nearly as fast as the 10.8 percent decline between 2004 and 2009. However, between 2010 and 2012, the annual decline in Standard Flats costs was 6.7 percent, more than three times as fast as the 2.1 percent decline in costs for all mail, and more than 4 times faster than in the earlier period. The data show that it takes longer for Standard Flats costs to align with volume declines than is the case with All Mail. This shows that the Commission's cost methodologies do not

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[3] ACD2008-2011, Mail Processing Models for Standard Flats volumes before 2008, ACMA_ACR2012_WORKSHEET, for Standard Flats Costs, and PRC Library References for the attributable costs and volumes for all mail before 2008.

[4] Annual percent changes are calculated as the compounded annual growth rate.

systematically misallocate excess capacity to Standard Flats. Otherwise, the difference between the indices for Standard Flats and Postal Input Costs would not have narrowed between 2010 through 2012.

Table 1
Cost and Volume Trends

Year	Attributable Costs		Volumes	
	Std Flats	All Mail	Std Flats	All Mail
2004	3,773,553,098	39,990,894,615	13,857,672,561	206,105,743,522
2005	3,771,747,057	35,636,500,000	14,025,889,177	211,743,347,004
2008	3,891,246,000	43,394,153,675	10,010,857,000	202,702,925,991
2009	3,497,110,000	36,506,803,000	7,814,466,000	177,057,802,000
2010	3,169,228,000	39,276,709,000	7,067,654,000	170,573,705,000
2011	3,142,861,579	39,006,012,000	6,791,672,000	167,934,367,000
2012	2,761,670,371	40,940,951,621	5,939,634,513	159,858,854,371
2004-2009	-1.5%	-1.8%	-10.8%	-3.0%
2010-2012	-6.7%	2.1%	-8.3%	-3.2%
Sources:				
Standard Mail Costs	ACMA_ACR2012_WORKSHEET			
Total Costs	ACD 2008-2012, USPS Library References for RPW and Cost Component & Segments Reports			
Standard Mail Volumes	ACD 2008-2012, USPS Library References for RPW and Cost Component & Segments Reports			
All Volumes	ACD 2008-2012, USPS Library References for RPW and Cost Component & Segments Reports			

II.   ACMA's Surreply Comments on the Public Representative's Analysis of its Cost Indices Are Generally Inaccurate.

The Public Representative has reviewed ACMA's Surreply Comments. The Public Representative agrees that its presentation seeking to reconstruct ACMA's entire formula for calculating the cost index in its spreadsheets did not properly cancel terms in equations 1-3. The Public Representative also agrees with ACMA that the ratio of a Price Index to a Cost Coverage Index results in the ratio of total costs in period 2 to period 1 times the inverse of a Paasche Volume Index. [5]

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[5] *See* Docket No. ACR2011, AMCA Initial Comments, Appendix at 36.

$$\left(\frac{V_2 UC_2}{V_1 UC_1}\right) \cdot \left(\frac{V_1 P_2}{V_2 P_2}\right)$$

ACMA stated in its Comments in the ACR2011 proceeding, that the first term is a Volume Index not a Rate Index. So it is not clear why ACMA now complains the Public Representative did not explain how it reached this conclusion (that the 1st term is a volume index), when ACMA initially represented this part of its index as a Paasche **volume** index. ACMA Initial Comments, ACR2011, Appendix A at 36. It is well known that Paasche Indices use second period weights, rather than base year weights, as does the Laspeyres Index.[6] ACMA identifies the first term as a Paasche volume index, not a Paasche price index.

ACMA seems to misunderstand the Public Representative's characterization of a volume index. Public Representative Reply Comments at 30. A volume index is not an appropriate index to employ when the task is to remove the effects of changes in worksharing discounts on attributable costs. In this case, the task is to develop a measure that compares the cost of a bundle of products even though costs and volumes are changing. This is properly accomplished by using the same volumes in both periods, and letting only unit costs change.

If one were to hold unit costs constant and let volumes vary, as does ACMA's index, one would have a measure of how much volume would change if unit costs were constant. If one wants to compare the output of a product over time, a volume index would be the appropriate measure, since only constant-price volumes are being compared. In contrast, if one is interested in comparing the unit cost of a product over time, a unit cost index (which is essentially a price index) would be the appropriate measure, since only constant volume unit costs are being compared over time.

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[6] "The Laspeyeres price index weights the prices by the quantities in the base year… The Paasche price index weights the prices by the quantities in the final year." Layard, P.R.G. and Walters, A.A., *Microeconomic Theory*, John's Hopkins University, 1978 at 156.

III.   ACMA's charts are not based upon the index it developed in 2011.

Although the mathematical derivation of ACMA's cost index is presented in its Comments in ACR2011, the index used to present the trend in unit costs for various products over time is different than the index it defends mathematically. The following formulas show how the ACMA cost index is calculated in its worksheets. ACMA_ACR2012.xlsx, Worksheet 3-Std Flt, column M, contains the final calculation forming the cost index used to produce standardized unit costs of Standard Flats. If one calculates the percentage change in prices between period 2 and the base period,[7] and then expands the formula in this cell to include all the formulas in the cells it relies upon, the cost index formula becomes:

$$\frac{1+\left(\frac{R_2}{R_1}-1\right)\cdot 100\%}{\frac{R_2}{C_2}} \;=\; \frac{\left(\frac{R_2}{R_1}\right)\cdot 1}{\frac{R_2}{C_2}} = \frac{R_2}{R_1}\cdot\frac{C_2}{R_2} = \frac{C_2}{R_1}$$

Where:

R_2 = Revenue in period 2,
R_1 = Revenue in period 1,
C_2 = Attributable cost in period 2,

$\dfrac{C_2}{R_1}$ is not a cost index.[8] It is close to being the inverse of cost coverage, except that costs and revenues are from different time periods. Therefore, one might look at the cost index charts as an approximation to the graph of the inverse

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[7] The percentage price increase appears to be calculated outside of the spreadsheet, with the exception of 1997 prices, and hard coded into column E entitled, "Rate Increases." These comments explicitly include a formula for the percentage increase in prices.

[8] ACMA calculated percentage price increases in different ways, depending upon the available data. Some years the percentage increase in price is simply $\left(\frac{P_2}{P_1}\right)$, and one obtains $\frac{C_2}{R_1}$. For other years, the price index is properly defined as $\frac{P_2 V_1}{P_1 V_1}$. This is the case for 2008 through 2012, since ACMA uses the Commission's formula for the percentage change in prices, which is a true price index. In this case, the formula becomes: $\frac{V_1 P_2}{V_1 P_1}\cdot\frac{V_2 UC_2}{V_2 P_2}$, where UC is unit costs. This formula differs from the formula espoused by ACMA. Specifically, it is the **price** index for period 2, multiplied by the inverse of cost coverage in period 2. It is NOT a **volume** index for period 2, multiplied by the ratio of period 2 to period 1 costs. The expression in this footnote is basically the inverse of cost coverage in period 2 multiplied by the percentage change in prices using the Commission's price cap methodology, for the product(s) in

of the cost coverage trend for each product. ACMA's charts do not yield new information that might help the Commission determine the accuracy of its cost measurements.

III.   Conclusion

ACMA's index, presented in the spreadsheets in the current docket, does not provide an accurate presentation of cost changes under constant volumes, and should not be used as a cost index. The Public Representative requests the Commission to review ACMA's cost index and determine whether, as presented, it is a useful tool for measuring the true cost of Standards Flats.

Respectfully submitted,

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question. This would decrease cost coverage for products, but only by a few percentage points. For example, the coverage for Standard Flats in 2012 is 73 percent. The weighted average price increase for Standard Flats was 2.2 percent in 2012. So even when ACMA uses the correct price index in its cost index, its cost index is dominated by cost coverage. Moreover, multiplying the inverse of cost coverage by a product's percentage price increase only exaggerates the apparently high "cost index".